

WHAT IS CLAIMED IS:

1. A DNA segment coding for a polypeptide comprising an amino acid sequence corresponding to autotaxin, or at least 5 amino acids thereof.

2. The DNA segment according to claim 1, wherein said DNA segment encodes the amino acid sequence set forth in any one of the SEQ ID NO:1 through SEQ ID NO:11 and SEQ ID NO:26 through SEQ ID NO:33.

3. A polypeptide free of proteins with which it is naturally associated and comprising an amino acid sequence corresponding to autotaxin, or at least 5 amino acids thereof.

4. The polypeptide according to claim 3, wherein said amino acid sequence comprises the amino acid sequence set forth in any one of the SEQ ID NO:1 through SEQ ID NO:11 and SEQ ID NO:26 through SEQ ID NO:33.

5. A polypeptide bound to a solid support and comprising an amino acid sequence corresponding to autotaxin, or at least 5 amino acids thereof.

6. The polypeptide according to claim 5, wherein said polypeptide comprises the amino acid sequence set forth in any one of the SEQ ID NO:1

through SEQ ID NO:11 and SEQ ID NO:26 through SEQ ID NO:33.

7. A recombinant DNA molecule comprising a vector and the DNA segment according to claim 1.

8. A cell that contains the recombinant DNA molecule according to claim 7.

9. An antibody having binding affinity for autotaxin, or binding fragment thereof.

10. A method of producing a polypeptide having an amino acid sequence corresponding to autotaxin comprising culturing the cell according to claim 8 under conditions such that said DNA segment is expressed and said polypeptide thereby produced and isolating said polypeptide.

11. A method of purifying the autotaxin peptide of claim 3, comprising the steps of:

i) collecting and concentrating supernatant from cultured A2058 human melanoma cells whereby a first preparation of said peptide is produced;

ii) salt fractionating said first preparation to produce a second peptide preparation;

iii) isolating said peptide from said second preparation so that said peptide is obtained in substantially pure form.

12. The method of claim 11, wherein said isolating step is effected by column chromatography.

13. A DNA segment for coding for a polypeptide comprising an amino acid sequence corresponding to autotaxin.

14. The DNA segment according to claim 1, wherein said DNA segment comprises any one of the SEQ ID NO:12 through SEQ ID NO:25.

15. The DNA segment according to claim 13 wherein said DNA segment comprises any one of the SEQ ID NO:12 through SEQ ID NO:25.

16. A polypeptide free of proteins with which it is naturally associated and comprising an amino acid sequence corresponding to autotaxin.

17. A polypeptide bound to a solid support and comprising an amino acid sequence corresponding to autotaxin.

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